

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/051108

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G04G1/00 H01Q1/27

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G04G H01Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/022459 A1 (KOBAYASHI TAKESHI) 21 February 2002 (2002-02-21) page 1, paragraphs 15,16 page 2, paragraph 22 page 3, paragraphs 42,43	1-16
X	US 6 266 019 B1 (HICKLE RANDY D ET AL) 24 July 2001 (2001-07-24) the whole document	1,4-7
A	GB 2 313 239 A (PYRONIX LTD) 19 November 1997 (1997-11-19) the whole document	1-16
A	US 6 134 188 A (FURCH REIHER ET AL) 17 October 2000 (2000-10-17) the whole document	1-16
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

22 September 2004

Date of mailing of the international search report

05/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl  
Fax (+31-70) 340-3016

Authorized officer

Pirozzi, G

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/051108

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 673 936 A (KOTOH KEIGO) 16 June 1987 (1987-06-16) the whole document -----	1-16
A	EP 1 274 150 A (EBAUCHESFABRIK ETA AG) 8 January 2003 (2003-01-08) cited in the application the whole document -----	1-16
A	EP 1 134 837 A (SEIKO EPSON CORP) 19 September 2001 (2001-09-19) cited in the application the whole document -----	1-16

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/051108

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002022459	A1	21-02-2002	JP 2002064601 A CN 1350347 A GB 2367189 A ,B	28-02-2002 22-05-2002 27-03-2002
US 6266019	B1	24-07-2001	AU 7026901 A EP 1301964 A1 WO 0209229 A1	05-02-2002 16-04-2003 31-01-2002
GB 2313239	A	19-11-1997	AU 2905097 A WO 9743888 A1	05-12-1997 20-11-1997
US 6134188	A	17-10-2000	DE 29714185 U1 EP 0896262 A1 JP 11064547 A	03-12-1998 10-02-1999 05-03-1999
US 4673936	A	16-06-1987	JP 58148526 A GB 2120048 A ,B	03-09-1983 23-11-1983
EP 1274150	A	08-01-2003	EP 1274150 A1 WO 03005484 A1 WO 03005486 A1 EP 1407510 A1 EP 1407513 A1 US 2004155818 A1 US 2004145975 A1	08-01-2003 16-01-2003 16-01-2003 14-04-2004 14-04-2004 12-08-2004 29-07-2004
EP 1134837	A	19-09-2001	CA 2352247 A1 EP 1134837 A1 US 6531988 B1 CN 1322388 T WO 0124309 A1	05-04-2001 19-09-2001 11-03-2003 14-11-2001 05-04-2001